

## **Programs of Study for 2014-2015 Academic Year**

For more information on the specific courses, please visit our career cluster webpage at http://tn.gov/education/cte/Career Clusters/Career Clusters.shtml

## STEM (Science, Technology, Engineering & Mathematics)

| Trial (Science, Technology, Engineering & Mathematics) |  |                                     |   |   |
|--|--|-------------------------------------|---|---|
| Program of Study                                       | Level 1  | Level 2                             | Level 3   | Level 4   |
| Engineering by Design                                  | Foundations of<br>Technology (EBD)             | Technological Design<br>(EBD)       | Advanced Design Applications (EBD) -and/or- Advanced Technological Applications (EBD)   | Engineering Design<br>(EBD)                     |
| Engineering  | Principles of<br>Engineering and<br>Technology | Engineering Design I                | Engineering Design II   | Engineering Practicum -and/or- AP Physics       |
| Technology   | Principles of<br>Engineering and<br>Technology | Digital Electronics                 | Robotics &<br>Automated Systems   | Engineering Practicum -and/or- AP Physics       |
| STEM Education   | STEM I: Foundation                             | STEM II: Applications               | STEM III: STEM in<br>Context  | STEM IV: STEM<br>Practicum                      |
| Project Lead the Way                                   | Introduction to<br>Engineering (PLTW)          | Principles of<br>Engineering (PLTW) | Choice of the following: Aerospace Engineering (PLTW) Civil Engineering & Architecture (PLTW) Biotechnical Engineering (PLTW) Digital Electronics (PLTW) Computer Integrated Manufacturing (PLTW) | Engineering Design<br>and Development<br>(PLTW) |

Available courses for elective credit in this cluster: Introduction to Geographic Information Systems (GIS)

Note: Courses marked EBD are part of the *Engineering by Design* curriculum package and may require additional costs and training to implement. Courses marked PLTW are part of the *Project Lead the Way* curriculum package and may require additional costs and training to implement.